

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A magnetic encoder for use in a wheel bearing that forms a pulse train by means of a magnetic force and generates a code, wherein the magnetic encoder is formed by radially magnetizing a magnetic rubber ring with alternate S poles and N poles, wherein said magnetic rubber ring is formed by mixing a rubber material and a magnetic powder, ~~characterized by the~~ and wherein said magnetic powder ~~being~~ is a rare earth magnetic powder.

2. (Original) The magnetic encoder as set forth in claim 1, wherein the rare earth magnetic powder comprises neodymium (Nd), iron (Fe) and boron (B).

3. (Original) The magnetic encoder as set forth in claim 1, wherein the rare earth magnetic powder comprises samarium (Sm), iron (Fe) and nitrogen (N).

4. (Currently Amended) The magnetic encoder as set forth in claim 1, wherein ~~[[a]]~~ said magnetic rubber ring has a thickness in ~~the a range of~~ from 0.2 to 2.0 mm.

5. (Currently Amended) A magnetic encoder for use in a wheel bearing that forms a pulse train by means of a magnetic force and generates a code, wherein the magnetic encoder is formed by radially magnetizing a magnetic rubber ring with alternate S poles and N poles, and wherein said magnetic rubber ring is formed by vulcanizing and adhering a magnetic rubber

base, in which unvulcanized rubber and rare earth magnetic powder are mixed, to a reinforcement ring.

6. (Original) The magnetic encoder as set forth in claim 5, wherein the rare earth magnetic powder comprises neodymium (Nd), iron (Fe) and boron (B).

7. (Original) The magnetic encoder as set forth in claim 5, wherein the rare earth magnetic powder comprises samarium (Sm), iron (Fe) and nitrogen (N).

8. (Currently Amended) The magnetic encoder as set forth in claim 5, wherein [[a]] said magnetic rubber ring that is vulcanized, molded and adhered to [[a]] said reinforcement ring has a thickness in ~~the a range of~~ from 0.2 to 2.0 mm.

9. (Currently Amended) The magnetic encoder as set forth in claim 2, wherein [[a]] said magnetic rubber ring has a thickness in ~~the a range of~~ from 0.2 to 2.0 mm.

10. (Currently Amended) The magnetic encoder as set forth in claim 3, wherein [[a]] said magnetic rubber ring has a thickness in ~~the a range of~~ from 0.2 to 2.0 mm.

11. (Currently Amended) The magnetic encoder as set forth in claim 6, wherein [[a]] said magnetic rubber ring that is vulcanized, molded and adhered to [[a]] said reinforcement ring has a thickness in ~~the a range of~~ from 0.2 to 2.0 mm.

12. (Currently Amended) The magnetic encoder as set forth in claim 7, wherein [[a]]
said magnetic rubber ring that is vulcanized, molded and adhered to [[a]] said reinforcement ring
has a thickness in ~~the~~ a range ~~of~~ from 0.2 to 2.0 mm.